

SYSTEM AND METHOD FOR CONTROLLING RESOURCE REVOCATION IN A MULTI-GUEST COMPUTER SYSTEM

Abstract of the Disclosure

At least one guest system, for example, a virtual machine, is connected to a host system, which includes a system resource such as system machine memory. Each guest system includes a guest operating system (OS). A resource requesting mechanism, preferably a driver, is installed within each guest OS and communicates with a resource scheduler included within the host system. If the host system needs any one the guest systems to relinquish some of the system resource it currently is allocated, then the resource scheduler instructs the driver within that guest system's OS to reserve more of the resource, using the guest OS's own, native resource allocation mechanisms. The driver thus frees this resource for use by the host, since the driver does not itself actually need the requested amount of the resource. The driver in each guest OS thus acts as a hollow "balloon" to "inflate" or "deflate," that is, reserve more or less of the system resource via the corresponding guest OS. The resource scheduler, however, remains transparent to the guest systems.